

Notulae to the Italian alien vascular flora: I

Gabriele Galasso¹, Gianniantonio Domina², Michele Adorni³,
Nicola M.G. Ardenghi⁴, Enrico Banfi¹, Gianni Bedini⁵, Alessio Bertolli⁶,
Giuseppe Brundu⁷, Mario Calbi⁸, Lorenzo Cecchi⁹, Carlo Cibei¹⁰,
Marco D'Antraccoli⁵, Aldo De Bastiani¹¹, Giorgio Faggi¹², Luigi Ghillani¹³,
Mauro Iberite¹⁴, Marta Latini¹⁴, Valerio Lazzeri¹⁵, Paola Liguori¹⁶, Karol Marhold¹⁷,
Roberto Masin¹⁸, Silvana Mauri¹⁹, Giuliano Mereu²⁰, Gianluca Nicoletta¹⁴,
Nicola Olivieri²¹, Simonetta Peccenini²², Enrico V. Perrino²³, Lorenzo Peruzzi⁵,
Alessandro Petraglia²⁴, Brunello Pierini²⁵, Filippo Prosser⁶, Francesco Roma-Marzio⁵,
Enrico Romani²⁶, Franco Sammartino¹⁵, Alberto Selvaggi²⁷, Giovanni Signorile²⁸,
Adriano Stinca²⁹, Filip Verloove³⁰, Chiara Nepi⁹

1 Sezione di Botanica, Museo di Storia Naturale di Milano, Corso Venezia 55, 20121 Milano, Italy
2 Dipartimento di Scienze Agrarie e Forestali, Università di Palermo, Via Archirafi 38, 90123 Palermo, Italy
3 Via degli Alpini 7, 43037 Lesignano de' Bagni (Parma), Italy
4 Dipartimento di Scienze della Terra e dell'Ambiente, Università di Pavia, Via Sant'Epifanio 14, 27100 Pavia, Italy
5 Dipartimento di Biologia, Università di Pisa, Via Derna 1, 56126 Pisa, Italy
6 Fondazione Museo Civico di Rovereto, Largo Santa Caterina 41, 38068 Rovereto (Trento), Italy
7 Dipartimento di Agraria, Università di Sassari, Via E. De Nicola 9, 07100 Sassari, Italy
8 Via Pisacane 16/8, 16129 Genova, Italy
9 Sezione di Botanica Filippo Parlatore, Museo di Storia Naturale, Università di Firenze, Via G. La Pira 4, 50121 Firenze, Italy
10 Salita Campasso di San Nicola 65/7, 16153 Genova, Italy
11 Via Morzanch 13, 32030 Cesiomaggiore (Belluno), Italy
12 Via Mestre 124, 47521 Cesena (Forlì-Cesena), Italy
13 Via Casalegno 6, 43123 Parma, Italy
14 Dipartimento di Biologia Ambientale, Sapienza Università di Roma, Piazzale A. Moro 5, 00185 Roma, Italy
15 Museo di Storia Naturale del Mediterraneo, Via Roma 234, 57127 Livorno, Italy
16 Via G. Del Papa 63, 50053 Empoli, Italy
17 Institute of Botany, Slovak Academy of Sciences, Dúbravská cesta 9, SK-845 23 Bratislava, Slovakia
18 Via Regazzoni Bassa 3, 35036 Montegrotto Terme (Padova), Italy
19 Via Cantù 2, 23875 Osnago (Lecco), Italy
20 Via Alghero 17, 08042 Bari Sardo (Ogliastra), Italy
21 Via Maestri del Lavoro 40, 64100 Teramo, Italy
22 Dipartimento di Scienze della Terra, dell'Ambiente e della Vita, Università di Genova, Corso Dogali 1/m, 16136 Genova, Italy
23 CIHEAM – Istituto Agronomico Mediterraneo di Bari, Via Ceglie 9, 70010 Valenzano (Bari), Italy
24 Dipartimento di Bioscienze, Università di Parma, Parco Area delle Scienze 11/a, 43124 Parma, Italy
25 Via L.L. Zamenhof 2, 56127 Pisa, Italy
26 Via D. Alighieri 16, 29019 San Giorgio Piacentino (Piacenza), Italy
27 Istituto per le Piante da Legno e l'Ambiente, Corso Casale 476, 10132 Torino, Italy
28 Museo Orto Botanico, Università di Bari, Via E. Orabona 4, 70126 Bari, Italy
29 Dipartimento di Agraria, Università di Napoli Federico II, Via Università 100, 80055 Portici (Napoli), Italy
30 Botanic Garden of Meise, Nieuwelaan 38, 1860 Meise, Belgium

Corresponding author: Gabriele Galasso (gabriele.galasso@comune.milano.it)

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Abstract

In this contribution, new data concerning the Italian distribution of alien vascular flora are presented. It includes new records, exclusions, and confirmations for Italy or for Italian administrative regions for taxa in the genera *Agave*, *Arctotheca*, *Berberis*, *Bidens*, *Cardamine*, *Catalpa*, *Cordyline*, *Cotoneaster*, *Dichondra*, *Elaeagnus*, *Eragrostis*, *Impatiens*, *Iris*, *Koeleria*, *Lamium*, *Lantana*, *Ligustrum*, *Limnophila*, *Lonicera*, *Lycianthes*, *Maclura*, *Mazus*, *Paspalum*, *Pelargonium*, *Phyllanthus*, *Pyracantha*, *Ruellia*, *Sorghum*, *Symphotrichum*, *Triticum*, *Tulbaghia* and *Youngia*.

Keywords

Floristic data, Italy

How to contribute

The text for the new records should be submitted electronically to Chiara Nepi (chiara.nepi@unifi.it). The corresponding specimen has to be sent to FI Herbarium: Sezione di Botanica Filippo Parlatore del Museo di Storia Naturale, Via G. La Pira 4, 50121 Firenze (Italy). Those texts concerning nomenclatural novelties (typifications only for accepted names), exclusions, and confirmations should be submitted electronically to: Gabriele Galasso (gabriele.galasso@comune.milano.it). Each text should be within 2,000 characters (spaces included).

Floristic records

Agave fourcroydes Lem. (Asparagaceae)

+ (NAT) **SIC:** Favignana (Trapani), Arcipelago delle Egadi, Isola di Marettimo, tratto iniziale del sentiero tra il paese e il castello di Capo Troia (WGS84: 37.974208°N; 12.066014°E), gariga e macchia rada, 64 m, 20 March 2015, L. Cecchi, F. Selvi, I. Bettarini, G. Certini & F. Furini (FI). – Naturalized alien species new for the flora of Sicily.

A small population (a few dozen adult individuals on an area of about 1 ha) settled in clearings of the garrigue, approx. 100 m from the village and next to a similar naturalized settlement of *Agave americana* L. Both remains of mature infructescences

and many vegetative propagules were observed all around the main population nucleus and along a nearby path, suggesting that the species is actively spreading.

L. Cecchi

Arctotheca calendula (L.) Levyns (Asteraceae)

– **CAM.** – Alien species to be excluded from the flora of Campania.

Brundu et al. (2015) reported *Arctotheca calendula* for Campania, without indicating the literature source. This record is the result of an erroneous interpretation of Wilson's (1998) paper, which refers this alien plant to the Campania township in SE Tasmania. Therefore, this species is to be excluded from Campania, the administrative region of Italy.

A. Stinca & G. Brundu

Berberis aquifolium Pursh (Berberidaceae)

≡ *Mahonia aquifolium* (Pursh) Nutt.

+ (CAS) **PUG:** Foggia (Foggia), Villa Comunale (UTM WGS84: 33T 546.4590), siepi e aiuole, ca. 64 m, 19 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Puglia.

The species is present with some young individuals in the context of hedges and flower beds in some shady areas of gardens on a calcareous alluvial vertisol. The collected specimens originated from seeds produced by some individuals cultivated for ornament in the Villa Comunale. The nomenclature is according to Adhikari et al. (2015).

N. Olivieri

Bidens subalternans DC. (Asteraceae)

+ (CAS) **LAZ:** Genzano di Roma (Roma), loc. Ponte Tre Armi (UTM WGS84: 33T 310879.4616501), incolti e margini stradali, 265 m, 14 November 2015, *M. Latini* (FI, RO); Tivoli (Roma), nei tornanti della Via Tiburtina venendo da Roma (UTM WGS84: 33T 316.4646), 16 November 1997, *G. Corazzi* (RO sub *B. bipinnata*). – Casual alien species new for the flora of Lazio.

The samples collected are ascribed to *B. subalternans* on the basis of two characters, achenes and bristled awns (Tutin 1976, Bogosavljević and Zlatković 2015, PlantNET 2016+). A specimen was also found in RO (*Herb. B. Anzalone*, sub *B. bipinnata* L.).

Moreover photographic material, available on-line, already pointed out the occurrence of this species in Lazio (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?t=7679>), probably neglected due to confusion with *B. bipinnata*.

M. Latini, G. Nicolella & M. Iberite

Bidens vulgata Greene (Asteraceae)

+ (NAT) **LIG**: Genova (Genova), Molini di Trensasco (WGS84: 44.452378°N; 8.961393°E), cunette e bordi stradali, 118 m, 29 November 2015, S. Peccenini (FI, GE). – Naturalized alien species new for the flora of Liguria.

The species occurs in several territories of Liguria, having been observed also in Castiglione Chiavarese (Genova) at 520 m (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?f=40&t=7131>), in Riva Ligure (Imperia) (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?f=40&t=67537>), and in Monte Gazzo (Genova municipality, Genova) at 308 m (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?f=40&t=81046>).

S. Peccenini & C. Cibeì

+ (NAT) **SAR**: Villagrande Strisaili (Ogliastra), alveo del Torrente Bau Sa Teula (UTM ED50: 32S 548.4423), greto, 80 m, 4 October 2015, G. Mereu, det. N. Ardenghi & G. Mereu (FI). – Naturalized alien species new for the flora of Sardegna.

Until now, *Bidens vulgata* has been recorded only from Friuli Venezia Giulia, Lombardia, and Emilia-Romagna (Celesti-Grapow et al. 2009, Verloove and Ardenghi 2015). After the record made by Verloove and Ardenghi (2015), the occurrence of the species has been ascertained also for other regions (http://www.actaplantarum.org/flora/flora_info.php?id=1211). *B. vulgata* (up to now misidentified with *B. frondosa* L.) may be more widespread than hitherto believed both across Sardegna and in the whole Italian territory.

G. Mereu & N.M.G. Ardenghi

+ (NAT) **TOS**: Collesalveti (Livorno), loc. Nugola (WGS84: 43.587651°N; 10.439258°E), wetland along a path in a mixed oak wood at the border of a muddy area, 13 m, 9 October 2015, V. Lazzeri (FI); Pisa (Pisa), Le Piagge, lungo la sponda dell'Arno (WGS84: 43.707239°N; 10.411268°E), sponda fluviale, 3 m, 15 October 2015, B. Pierini & L. Peruzzi (PI). – Naturalized alien species new for the flora of Toscana.

The occurrence of *Bidens vulgata* in Italy was so far limited to Lombardia, Friuli Venezia Giulia and Emilia-Romagna (Verloove and Ardenghi 2015, and literature

cited therein). On the basis of the high similarity between *B. vulgata* and *B. frondosa* L., both in terms of morphology and ecology, *B. vulgata* may have been sometimes overlooked and confused with the latter, whose presence in the region is documented since a very long time (Caruel 1860).

V. Lazzeri, B. Pierini & L. Peruzzi

***Cardamine occulta* Hornem. (Brassicaceae)**

= *Cardamine debilis* D.Don, nom. illeg. \equiv *Cardamine hamiltonii* G.Don \equiv *Cardamine flexuosa* With. subsp. *debilis* O.E.Schulz

+ (CAS) **TAA**: Trento (Trento), Le Albere, Corso del Lavoro e della Scienza (UTM WGS84: 32T 663.5102), synanthropic habitat, 191 m, no exp., 20 November 2015, V. Lazzeri (FI). – Casual alien species new for the flora of Trentino-Alto Adige.

After several authors reported this taxon under different names, Marhold et al. (2016) clarified that the oldest name applicable for the so-called “Asian *Cardamine flexuosa*” is *C. occulta*. In Italy *C. occulta* was first found in Sardegna (Lazzeri et al. 2013, sub *C. flexuosa* With. subsp. *debilis* O.E.Schulz), then in other central and northern Italian regions (Toscana and Lombardia: Ardenghi and Mossini 2014, sub *C. flexuosa* subsp. *debilis*; Piemonte: Verloove and Ardenghi 2015, sub *C. hamiltonii* G.Don; Veneto: Marhold et al. 2016, sub *C. occulta*). The present finding broadens the distribution of *C. occulta* in northern Italy eastwards to Trentino-Alto Adige. As observed in Sardegna, *C. occulta* has been found growing together with the similar *C. hirsuta* L. in urban environments. Its presence in this region could date back to several years ago, moreover its distribution may be much broader than reported, given the possible confusion with *C. hirsuta*.

V. Lazzeri & K. Marhold

***Catalpa bignonioides* Walter (Bignoniaceae)**

+ (CAS) **ABR**: Pescara (Pescara), presso Viale G. D’Annunzio (UTM WGS84: 33T 435.4700), margine stradale, ca. 3 m, 20 September 2015, N. Olivieri (FI). – Casual alien species new for the flora of Abruzzo.

Some young individuals grow on a sandy substrate in a private courtyard adjacent to the road. The site is located between buildings in the urban area.

N. Olivieri

***Cordyline australis* (G.Forst.) Endl. (Asparagaceae)**

+ (CAS) **MAR**: Cupra Marittima (Ascoli Piceno), Via Tommaso da Marano, giardino pubblico prossimo al litorale adriatico (UTM WGS84: 33T 406.4765), epifita su stipite di *Phoenix canariensis*, ca. 2 m, 12 November 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Marche.

Some young individuals have developed on the trunk of medium-sized *Phoenix canariensis* Chabaud in a public garden located close to the sea. *Cordyline australis* is cultivated in the surroundings, where it regularly flowers and fruits. As already observed for Campania (Stinca et al. 2013) and Abruzzo (Olivieri 2015), here too *C. australis* grows as an epiphyte on *P. canariensis*.

N. Olivieri

***Cotoneaster coriaceus* Franch. (Rosaceae)**

– **ITALIA (ABR, LOM, TOS)**. – Alien species to be excluded from the flora of Italy (Abruzzo, Lombardia, and Toscana).

On the basis of the following Notula, this species is to be excluded from Italy. Probably also the recent record for the flora of Campania (Del Guacchio 2015) is to be referred to *Cotoneaster lacteus* W.W.Sm.

G. Galasso & E. Banfi

***Cotoneaster lacteus* W.W.Sm. (Rosaceae)**

– *Cotoneaster coriaceus* auct., non Franch.

+ (NAT) **ITALIA (LOM)**: Laveno-Mombello (Varese), Punta San Michele, porzione N (UTM ED50: 32T 470.5085), rupi sul lago, ca. 197 m, NW, 22 June 2007, *G. Galasso* (MSNM sub *C. coriaceus*); Milano (Milano), Parco delle Cave (Baggio), incolti tra Via E. Quarti e Via P. Marchesi (Villa Marazzi) (UTM ED50: 32T 507.5035), vegetazione a *Robinia pseudoacacia* e *Rubus* spp., 125 m, no exp., 6 June 2010, *G. Galasso* (MSNM sub *C. coriaceus*). – Naturalized alien species new for the flora of Italy (Lombardia).

+ (CAS) **ABR**: San Vito Chietino (Chieti), loc. Marina, incolto al margine di strada urbana sul versante collinare rivolto verso il Mare Adriatico (UTM WGS84: 33T 454.4684), margine stradale, ca. 20 m, 7 September 2014, *N. Olivieri* (FI). – Casual alien species new for the flora of Abruzzo.

+ (NAT) **TOS**: Isola d'Elba, Marciana (Livorno), strada (Via di Lavacchio) tra Poggio e la Madonna del Buonconsiglio (UTM ED50: 32T 597.4737), bosco, 240 m, NE,

19 June 2008, *G. Galasso* (FI sub *C. coriaceus*, MSNM sub *C. coriaceus*); Montalbano, Serravalle Pistoiese (Pistoia), ex cava presso il Podere Selva Piana (UTM ED50: 32T 648.4862), versante scosceso di cava abbandonata, ca. 150 m, NE, 18 August 2010, *G. Gestri* (MSNM sub *C. coriaceus*). – Naturalized alien species new for the flora of Toscana.

Until now, *Cotoneaster lacteus* has been misidentified in Italy with *C. coriaceus* Franch., with the latter species having been recorded for Lombardia (Banfi et al. 2009, Banfi and Galasso 2010, Galasso 2010), Toscana (Galasso et al. 2011), and Abruzzo (Olivieri 2015). Indeed, Lu and Brach (2003) and Dickoré and Kasperek (2010) regard these names as heterotypic synonyms. Nevertheless, the monograph by Fryer and Hylmö (2009), followed by Stace (2010), considers them as distinct species. The specimens collected in Italy correspond to *C. lacteus* as they show its morphological features (Fryer and Hylmö 2009): new growth tomentose-villous, mostly remaining so, or only slowly glabrescent (*versus* new growth tomentose, very soon glabrescent), leaves on sterile shoots distichous, 42–120 × 20–60 mm, adaxially dull (*vs.* often spiralled, 34–52 × 16–24 mm, adaxially shiny). As stated by Tison and de Foucault (2014), if *C. coriaceus* and *C. lacteus* are regarded as distinct, then the plants cultivated and naturalized appear to be *C. lacteus*.

G. Galasso & E. Banfi

Cotoneaster pannosus Franch. (Rosaceae)

+ (CAS) **PUG**: Otranto (Lecce), Viale Rocamatura (UTM WGS84: 34T 797.4450), epifita sullo stipite di *Phoenix canariensis*, ca. 7 m, 20 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Puglia.

A single plant, identified according to Fryer and Hylmö (2011), has developed on the trunk of an individual of *Phoenix canariensis* Chabaud. The *Cotoneaster* specimen is small, but it is able to produce flowers and fruits.

N. Olivieri

Dichondra micrantha Urb. (Convolvulaceae)

+ (CAS) **CAL**: Scalea (Cosenza), in centro (UTM WGS84: 33S 567.4407), fessure della pavimentazione, 18 m, 15 August 2013, *A. Stinca* (PORUN); Montegiordano (Cosenza), loc. Marina, presso l'alveo del Canale Cardona (UTM WGS84: 33T 636.4431), pineta a *Pinus halepensis*, ca. 10 m, 21 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Calabria.

In Montegiordano, some individuals of this species occur in the sporadic herbaceous vegetation that colonizes the sandy soil with litter of needles inside an artificial

plantation of *Pinus halepensis* Mill., located at a short distance from the coast and characterized by sparse shrubs of *Vitex agnus-castus* L., *Cistus monspeliensis* L. *Pistacia lentiscus* L., and *Nerium oleander* L. subsp. *oleander*.

N. Olivieri & A. Stinca

***Elaeagnus pungens* Thunb. (Elaeagnaceae)**

+ (CAS) **ABR**: Pescara (Pescara), margine della “Pineta Dannunziana” (UTM WGS84: 33T 437.4700), arbusteto rado sotto le chiome di esemplari di *Pinus halepensis*, ca. 2 m, 9 August 2015, N. Olivieri (FI). – Casual alien species new for the flora of Abruzzo.
+ (CAS) **PUG**: Otranto (Lecce), Viale Rocamatura (UTM WGS84: 34T 797.4450), epifita su stipite di *Phoenix canariensis*, ca. 7 m, 20 August 2015, N. Olivieri (FI). – Casual alien species new for the flora of Puglia.

In Abruzzo, a young individual of this species grows in a site that is partially shaded by the foliage of *Pinus halepensis* Mill. In Puglia, the plants have developed on the trunk of *Phoenix canariensis* Chabaud or within hedges of *Pittosporum tobira* (Thunb.) W.T.Aiton growing nearby.

N. Olivieri

+ (NAT) **EMR**: Cervia (Ravenna), Pineta di Cervia presso Milano Marittima (UTM WGS84: 33T 288.4906), pineta litoranea, 1 m, 18 October 2014, G. Faggi (BOLO); Langhirano (Parma), loc. Calicella (UTM WGS84: 32T 601.4948), scarpata boscata a dominanza di *Robinia pseudoacacia*, 250 m, 9 March 2015, M. Adorni (FI); *ibidem*, 17 October 2015, M. Adorni (FI). – Naturalized alien species new for the flora of Emilia-Romagna.

The population from Calicella comprises many individuals whose size varies from a few decimeters to several meters. The population from Pineta di Cervia, consisting of several scattered plants, was also reported on Acta Plantarum Forum (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?t=43711>).

M. Adorni, G. Faggi & L. Ghillani

***Eragrostis mexicana* (Hornem.) Link subsp. *virescens* (J.Presl) S.D.Koch & Sánchez Vega (Poaceae)**

+ (NAT) **EMR**: Castelvetro Piacentino (Piacenza), Po a Castelvetro (UTM WGS84: 32T 578.4996), vegetazione sponale su sabbia, 33 m, 8 August 2011, E. Romani (FI); Monticelli d'Ongina (Piacenza), Stagni Maginot (UTM WGS84: 32T 576.4997), incolto erboso su suolo eutrofico, 33 m, 16 July 2013, E. Romani (FI); Roccabianca (Parma), confluenza tra i fiumi Taro e Po (UTM WGS84: 32T 599.4984), saliceto a

Salix alba, 31 m, 8 July 2015, *M. Adorni* (FI). – Naturalized alien subspecies new for the flora of Emilia-Romagna.

This subspecies is a Neotropical alien plant, whose presence in the Piacenza province was predicted by Banfi et al. (2005). Its occurrence in Emilia-Romagna was also reported in Acta Plantarum Forum (<http://www.actaplantarum.org/floraitaliae/view-topic.php?t=52672>). The observed populations are locally abundant.

E. Romani, M. Adorni, E. Banfi, G. Galasso & L. Ghillani

Impatiens glandulifera Royle (Balsaminaceae)

+ (NAT) **TOS**: Abetone (Pistoia), Val di Luce, Rio Le Pozze (UTM WGS84: 32T 630.4889), gravel river bed, 1350 m, no exp., 2 September 2015, *F. Sammartino* (FI). – Naturalized alien species new for the flora of Toscana.

Impatiens glandulifera is an important invader of riparian habitats (Hejda and Pyšek 2006, Cockel and Tanner 2012) which, in turn, are among the most susceptible to deterioration (Richardson et al. 2007). So far, the distribution of *I. glandulifera* in Italy was limited to the northern regions, where it exhibited mild to severe invasiveness (Celesti-Grapow et al. 2009). The present finding represents the first clue of its possible ongoing diffusion southwards. The plants that have been found in Rio Le Pozze have likely spread through hydrochory, thus suggesting a consolidated presence of *I. glandulifera* in Toscana. Further research will clarify the distribution and invasiveness of *I. glandulifera* in the region.

V. Lazzeri & F. Sammartino

Impatiens parviflora DC. (Balsaminaceae)

+ (NAT) **EMR**: Neviano degli Arduini (Parma), terrazzo fluviale del Torrente Enza, poco a valle della confluenza del Fosso della Massagna (UTM WGS84: 32T 604.4925), bosco ripariale a dominanza di *Alnus incana*, 370 m, 8 June 2010, *A. Petraglia* (*Herb. A. Petraglia*); Palanzano (Parma), Torrente Enza a valle del ponte di Selvanizza (UTM WGS84: 32T 600.4922), bosco ripariale a dominanza di *Alnus incana*, 445 m, 7 June 2013, *M. Adorni* (FI). – Status change from casual to naturalized alien for the flora of Emilia-Romagna.

Alessandrini et al. (2009) report the species as casual for Emilia-Romagna, but without further information (A. Alessandrini, *in litt.*). *Impatiens parviflora* was found in continuous and extensive populations within hygrophilous *Alnus incana* (L.) Moench woods at the middle course of the river Enza, which marks the border between the provinces of Parma and Reggio nell'Emilia.

A. Petraglia, M. Adorni & L. Ghillani

Iris albicans Lange (Iridaceae)

+ (NAT) **CAL**: Oriolo (Cosenza), lungo la SP481 nei pressi del km 19 (WGS84: 40.043177°N; 16.429091°E), incolto sul margine stradale, 640 m, 15 April 2014, *F. Roma-Marzio & P. Liguori* (FI). – Naturalized alien species new for the flora of Calabria.

Many shoots were found along the edge of the road, probably originating from rhizomes of cultivated plants growing in several neighbouring houses. Several plants were also observed in the nearby locality named Serra Salice (Oriolo municipality, Cosenza). According to Conti et al. (2005) and Celesti-Grapow et al. (2009), this species was so far recorded only for Lazio and Campania.

F. Roma-Marzio & P. Liguori

Koelreuteria paniculata Laxm. (Sapindaceae)

+ (CAS) **PUG**: Foggia (Foggia), Villa Comunale (UTM WGS84: 33T 546.4590), siepi e aiuole, ca. 64 m, 19 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Puglia.

Some young individuals grow interspersed with ornamental shrubs as part of some hedges and flower beds. They have originated from seeds produced by an adult specimen located in an area near the entrance of the gardens; they are sometimes able to bear fruit.

N. Olivieri

Lamiaeum argenteum (Smejkal) Soják (Lamiaceae)

≡ *Lamium argenteum* (Smejkal) Henker ex G.H.Loos ≡ *Lamiaeum galeobdolon* (L.) Ehrend. & Polatschek subsp. *argenteum* (Smejkal) Stace

+ (NAT) **EMR**: Sant'Agata Feltria (Rimini), loc. Sapigno Pietra Bassa, fuori paese (UTM WGS84: 33T 275.4866), scarpata al margine di strada, 402 m, 15 July 2012, *G. Faggi* (BOLO); Terenzo (Parma), loc. Cella di Palmia (UTM WGS84: 32T 592.4943), bosco mesofilo al margine di strada, 460 m, 5 November 2012, *L. Ghillani* (*Herb. L. Ghillani*); *ibidem*, 11 March 2014, *M. Adorni & L. Ghillani* (*Herb. L. Ghillani*); Salsomaggiore Terme (Parma), loc. Scipione Ponte (UTM WGS84: 32T 576.4965), margine di strada, 30 March 2015, *M. Adorni* (FI). – Naturalized alien species new for the flora of Emilia-Romagna.

All the observed populations cover the soil compactly. The population of Cella di Palmia, the most extensive, has spread to several dozen meters from the roadside towards

the centre of the woods. It can, therefore, be considered naturalized. The population of Sapigno Pietra Bassa was also reported in Acta Plantarum Forum (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?t=43830>).

M. Adorni, G. Faggi & L. Ghillani

Lantana camara L. subsp. *aculeata* (L.) R.W.Sanders (Verbenaceae)

+ (CAS) **ITALIA** (**ABR**): Pescara (Pescara), Piazza Italia (UTM WGS84: 33T 435.4701), bordo di selciato nei pressi di un palazzo, ca. 2 m, 30 July 2015, *N. Olivieri* (FI). – Casual alien subspecies new for the flora of Italy (Abruzzo).

Some young individuals grow in the spaces between the limestone blocks at the foot of a palace coated with the same material. *Lantana camara* subsp. *aculeata* is cultivated in the vicinity, with individuals bearing fruit regularly. It was identified according to Sanders (2012).

N. Olivieri

Ligustrum lucidum W.T.Aiton (Oleaceae)

+ (CAS) **CAL**: Montegiordano (Cosenza), loc. Marina, presso l'alveo del Canale Cardona (UTM WGS84: 33T 636.4431), pineta a *Pinus halepensis*, ca. 10 m, 21 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Calabria.

Some young individuals grow in a coastal pine forest of *Pinus halepensis* Mill. in rather cool, shaded areas, on sandy substrate covered by a litter of pine needles; in areas where it is less represented, the sparse undergrowth consists of *Vitex agnus-castus* L., *Cistus monspeliensis* L., *Pistacia lentiscus* L., and *Nerium oleander* L. subsp. *oleander*.

N. Olivieri

Limnophila × *ludoviciana* Thieret (Plantaginaceae)

(*Limnophila indica* (L.) Druce × *L. sessiliflora* (Vahl) Blume)

+ (NAT) **VEN**: Porto Tolle (Rovigo), nei pressi di loc. Gnocca (MTB 1039/4) (UTM WGS84: 33T 288.4975), risaia, -1,5 m, 27 August 2013, *G. Favaro*, *R. Masin*, *B. Pellegrini* & *L. Tosetto* (*Herb. R. Masin*); *ibidem*, 13 September 2015 (*Herb. R. Masin*); Gazzo Veronese (Verona), 250 m a WSW della Turbina presso Corte Nuova, nel SIC "Palude

del Busatello” (MTB 0832/3) (UTM WGS84: 32T 663.4996), risaia, 15 m, 16 October 2015, A. Bertolli, F. Prosser, G. Tomasi & S. Andreatta (FI, ROV). – Naturalized alien nothospecies new for the flora of Veneto.

This hybrid was identified for the first time by Piccoli (1974) for Emilia-Romagna, based on populations discovered a few years earlier in rice fields in the Ferrara province (Codigoro and Jolanda di Savoia; see Buzzi 1973). He also provided a detailed description of the plant (Piccoli 1974). Viggiani et al. (2003) provided several color pictures of plants from the same areas. The plants collected in Veneto are identical to those of Ferrara province, according to the above-cited sources. Piccoli et al. (2014) indicated this hybrid as occurring in Italy only in the administrative region of Emilia-Romagna, specifically in Ferrara and Reggio nell’Emilia provinces (see also <http://www.actaplantarum.org/floraitaliae/viewtopic.php?f=40&t=79251>). The new findings reveal a gradual expansion of the hybrid, which appears to be relatively slow, perhaps due to its estimated infertility or low fertility.

F. Prosser, R. Masin & A. Bertolli

Lonicera fragrantissima Lindl. & Paxton (Caprifoliaceae)

= *Lonicera standishii* Carrière f. *standishii* = *Lonicera standishii* Carrière f. *lancifolia* Rehder

+ (NAT) **ITALIA (VEN)**: Vidor (Treviso), riva sinistra del Fiume Piave (UTM WGS84: 33T 271.5082), terreno alluvionale, boscaglia chiara mista, 135 m, 10 February 2015, A. De Bastiani (FI). – Naturalized alien species new for the flora of Italy (Veneto).

Lonicera fragrantissima is a bushy, not climbing honeysuckle native to central China. It grows in forests and scrubs at elevations between 100 and 2,700 m (Yang et al. 2011). The species belongs to the same clade as *L. hispida* Pallas ex Schult., and possibly a few other Asian entities as suggested by Theis et al. (2008). It is sold as a garden shrub for winter flowering and flower fragrance. It is self-fertile and produces red berries (bibaccae, according to Spjut 1994) that are easily dispersed in late spring by birds, especially blackbirds.

E. Banfi & A. De Bastiani

Lycianthes rantonnetii (Carrière) Bitter (Solanaceae)

≡ *Solanum rantonnetii* Carrière

+ (CAS) **LIG**: Cogoleto (Genova), strada vicinale del Chiappino (WGS84: 44.396700°N; 8.636420°E), bordo strada, 160 m, 13 October 2015, M. Calbi (FI). – Casual alien species new for the flora of Liguria.

M. Calbi & S. Peccenini

***Maclura pomifera* (Raf.) C.K.Schneid. (Moraceae)**

+ (CAS) **TOS**: Pisa (Pisa), Tenuta di San Rossore, Parco Regionale Migliarino, San Rossore, Massaciuccoli, Via Angrognà, poco dopo l'incrocio con Via Bicchì nei pressi della foce del Fiume Morto Nuovo (WGS84: 43.73180°N; 10.28179°E), retroduna al margine di un bosco con prevalenza di *Quercus ilex*, substrato sabbioso, 4 m, 7 October 2015, M. D'Antraccoli & F. Roma-Marzio (FI). – Casual alien species confirmed for the flora of Toscana.

Maclura pomifera is a deciduous and dioecious tree native to eastern USA (Burton 1990). It is planted worldwide as an ornamental. The species readily escapes from cultivation and invades disturbed areas (Burton 1990). At present, it is reported for all Italian regions except Valle d'Aosta and was recorded as doubtful in Toscana (Conti et al. 2005, 2007, Bacchetta et al. 2009, Celesti-Grapow et al. 2009). We found a single tree near the shoreline.

F. Roma-Marzio, M. D'Antraccoli, G. Bedini & L. Peruzzi

***Mazus pumilus* (Burm.f.) Steenis (Mazaceae)**

+ (NAT) **LAZ**: Roma (Roma), Piazza Santa Maria in Trastevere (UTM WGS84: 33T 290.4640), nelle fessure della pavimentazione (sampietrini), 19 m, 16 May 2015, A. Selvaggi (FI, *Herb. A. Selvaggi*). – Naturalized alien species new for the flora of Lazio.

The presence of *M. pumilus* in Italy was recorded for the first time sub *Mazus japonicus* (Thunb.) Kuntze at the Botanical Garden of Pavia by Peccenini Gardini (1985), then in other localities of Lombardia (e.g. Desfayes 1997, Banfi and Galasso 2010, <http://www.actaplantarum.org/floraitaliae/viewtopic.php?t=54117>). In Piemonte, it has been reported as casual in some localities (Antonietti and Dellavedova 2013), and as naturalized and widespread in others (Selvaggi and Dellavedova 2015). In Veneto, the species was collected and identified for the first time in 2011 by Francesco Di Carlo, and later confirmed by Galasso et al. (2013). In most of the above-mentioned Italian regions, and also in Roma, the species grows between the cracks of the stone paving of urban centres. The presence of *M. pumilus* in Lazio and Roma was not recorded by Anzalone et al. (2005, 2010) and Celesti-Grapow et al. (2013).

A. Selvaggi

***Paspalum dasyleurum* Kunze ex Desv. (Poaceae)**

= *Paspalum pachyrrhizum* Steud.

+ (CAS) **ITALIA (LOM)**: Olgiate Molgora (Lecco), Pianezzo, tra Via Bagaggera e Via Pianezzo, di fronte alla fontanella presso la chiesa (WGS84: 45.709998°N;

9.394985°E), spigolo umido tra la strada e il muro, 280 m, NNW, 2003, S. Mauri (MSNM sub *P. dilatatum*, scan in FI). – Casual alien species new for the flora of Italy (Lombardia).

Recently, in the MSNM herbarium, we found a specimen collected in 2003 under the name *P. dilatatum* that was visibly different from the latter species, especially by having a greater number of racemes with smaller spikelets. Therefore, it was first thought to belong to *P. urvillei* Steud., a South American weed that is widely naturalized beyond its native distribution area, also in Europe (for instance in the Iberian Peninsula; e.g. Litzler 1979). However, on closer examination, it proved to differ also from this species. According to Zuloaga and Morrone (2005) these plants correspond to *P. dasypleurum*. A comparison with type material of this species as well as of *P. pachyrrhizum* Steud., a heterotypic synonym, both preserved in BR, confirmed our identification. This species is native to Argentina and Chile where it is a well-known forage grass or weed. To our knowledge, it has not been recorded before in the Old World. Field surveys conducted in 2015 could not confirm the current persistence of this species; therefore, it is considered a casual alien. However, it may have been overlooked so far in Italy or elsewhere in Europe. Therefore, a key for the members of the informal *Dilatata* group occurring in Europe is presented.

- | | |
|---|--|
| 1 | Panicle branches (2–)3–5(–7); spikelets 2.8–4.0 mm long; leaf sheath usually glabrous (in Europe) <i>P. dilatatum</i> |
| – | Panicle branches more numerous, up to 30; spikelets 1.8–2.8 mm long; leaf sheath usually pubescent (in Europe) 2 |
| 2 | Spikelets acute at apex; lower lemma and upper glume as long as fertile floret..... <i>P. dasypleurum</i> |
| – | Spikelets acuminate at apex; lower lemma and upper glume markedly longer than fertile floret..... <i>P. urvillei</i> |

F. Verloove, E. Banfi, G. Galasso & S. Mauri

***Pelargonium zonale* (L.) L'Hér. (Geraniaceae)**

+ (CAS) **PUG:** Isole Tremiti (Foggia), Isola di San Domino, loc. Piana Grande (UTM WGS84: 33S 540.4663), incolto ai margini di un sentiero all'interno dell'isola, ca. 50 m, 27 July 2015, N. Olivieri (FI). – Casual alien species new for the flora of Puglia.

Several individuals grow in uncultivated areas along trails at the edge of natural vegetation consisting of pine woods of *Pinus halepensis* Mill.

N. Olivieri

***Phyllanthus tenellus* Roxb. (Phyllanthaceae)**

+ (CAS) **LIG:** Genova (Genova), giardini fra Corso Dogali e Corso Carbonara (WGS84: 44.416718°N; 8.927880°E), aiuola, 50 m, May 2015, *S. Peccenini* (GE); *ibidem*, 20 September 2015, *S. Peccenini* (FI). – Casual alien species new for the flora of Liguria.

Native to the Mascarene Islands (Indian Ocean) and naturalized in tropical and subtropical areas (America, Australia), it grows since at least 20 years in the greenhouses of the Genova Botanical Garden, where it bears fruit and disseminates regularly. The recent climate changes has allowed it to spread to the urban environment. The species, so far known as naturalized only in Sicilia (Crisafulli et al. 2011), was identified according to Webster (1970).

S. Peccenini

***Pyracantha crenulata* (D.Don) M.Roem. (Rosaceae)**

+ (CAS) **ABR:** Pescara (Pescara), “Pineta Dannunziana” (UTM WGS84: 33T 437.4700), radure in pineta, ca. 3 m, 9 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Abruzzo.

Several individuals of different sizes grow in clearings of the “Pineta Dannunziana”. The species is accompanied by *Pittosporum tobira* (Thunb.) W.T.Aiton, *Laurus nobilis* L., *Ficus carica* L., as well *Cortaderia selloana* (Schult. & Schult.f.) Asch. & Graebn.

N. Olivieri

***Ruellia simplex* C.Wright (Acanthaceae)**

+ (CAS) **PUG:** Otranto (Lecce), presso Via M. Corti (UTM WGS84: 34T 797.4450), margini stradali e bordi di aiuole, ca. 7 m, 20 August 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Puglia.

Several individuals have developed on the edge of a road leading to a private courtyard. The plants were identified according to Wunderlin and Hansen (2008). According to the same authors, *R. simplex* is a perennial species native to Mexico, West Indies, western Bolivia, SW Brazil, Paraguay, Uruguay, and NW Argentina. In tropical and subtropical regions, it is grown as an ornamental plant and this has caused its spread into the wild in the southeastern regions of the United States (e.g., Florida) where it occurs as an invasive species (Wunderlin and Hansen 2008). Recently, it has been reported for Italy in Sardegna by Lazzeri et al. (2015).

N. Olivieri

***Sorghum bicolor* (L.) Moench (Poaceae)**

+ (CAS) **PUG**: Casamassima (Bari), svincolo SS100 per Casamassima-Turi (WGS84: 40.948337°N; 16.930767°E), margine stradale, 220 m, 13 October 2015, *G. Signorile & E.V. Perrino* (BI, scan in FI). – Casual alien species new for the flora of Puglia.

Sorghum bicolor occurs in all regions of southern Italy (including Sicilia and Sardegna) (Conti et al. 2005), although, in the past, it was recorded in Campania and Abruzzo by mistake (Conti et al. 2007). It is an archaeophyte that does not usually form stable populations (Celesti Grapow et al. 2009).

G. Signorile & E.V. Perrino

***Symphyotrichum pilosum* (Willd.) G.L.Nesom (Asteraceae)**

≡ *Aster pilosus* Willd.

+ (CAS) **EMR**: Varano de' Melegari (Parma), Torrente Ceno nei pressi di Viazzano (UTM WGS84: 32T 582.4949), greto ghiaioso, 170 m, 12 August 2011, *M. Adorni* (FI). – Casual alien species new for the flora of Emilia-Romagna.

The population consists of several plants distributed over an area of several dozen square meters.

M. Adorni, E. Banfi, G. Galasso & L. Ghillani

***Triticum cylindricum* (Host) Ces., Pass. & Gibelli (Poaceae)**

≡ *Aegilops cylindrica* Host

+ (NAT) **EMR**: Fidenza (Parma), stazione ferroviaria di Castione Marchesi (UTM WGS84: 32T 582.4974), bordi di massicciata ferroviaria, 52 m, 22 May 2013, *M. Adorni & L. Ghillani* (FI); Terenzo (Parma), Rocca San Genesio, lungo una mulattiera nei pressi della Rocca (UTM WGS84: 32T 585.4943), lungo mulattiera, 500 m, 25 June 2014, *L. Ghillani* (FI). – Naturalized alien species new for the flora of Emilia-Romagna.

Triticum cylindricum is an archaeophyte of Pontic origin (Pignatti 1982, Celesti-Grapow et al. 2009) reported in northern Italy but not in Emilia-Romagna (Perrino et al. 2014). According to the same authors, this species also occurs in Basilicata, Puglia, and Sardegna. At the time of discovery, both populations appear to be fairly large.

M. Adorni, E. Banfi, G. Galasso & L. Ghillani

Tulbaghia violacea Harv. (Amaryllidaceae)

+ (CAS) **ITALIA (MAR)**: Cupra Marittima (Ascoli Piceno), al margine di Viale T. da Marano, in un'area prossima al Mare Adriatico (UTM WGS84: 33T 406.4765), epifita su stipite di *Phoenix canariensis*, ca. 4 m, 7 September 2015, *N. Olivieri* (FI). – Casual alien species new for the flora of Italy (Marche).

This species was identified according to Matthews (2011). It grows in isolation at the base of the trunk of a medium-sized individual of *Phoenix canariensis* Chabaud. The species was also observed in Emilia-Romagna in 2008 (<http://www.actaplantarum.org/floraitaliae/viewtopic.php?f=40&t=45026&p=289861>).

N. Olivieri

Youngia japonica (L.) DC. subsp. *japonica* (Asteraceae)

≡ *Crepis japonica* (L.) Benth.

+ (CAS) **ITALIA (LIG)**: Genova (Genova), giardini fra Corso Dogali e Corso Carbonara (WGS84: 44.416692°N; 8.928248°E), bordo strada, 50 m, 11 March 2015, *S. Peccenini* (FI, GE). – Casual alien species new for the flora of Italy (Liguria).

This species is native to East Asia, and is naturalized in warm areas of all continents. It was identified according to Shi and Kilian (2011).

S. Peccenini

References

- Adhikari B, Milne R, Pennington RT, Särkinen T, Pendry CA (2015) Systematics and biogeography of *Berberis* s.l. inferred from nuclear ITS and chloroplast *ndhF* gene sequences. *Taxon* 64(1): 39–48. doi: 10.12705/641.21
- Alessandrini A, Bracchi G, Merloni N, Pellizzari M, Piccoli F (2009) Regional Experts: Emilia-Romagna. In: Celesti-Grapow L, Pretto F, Brundu G, Carli E, Blasi C (Eds) A thematic contribution to the National Biodiversity Strategy. Plant invasion in Italy, an overview. Ministry for the Environment Land and Sea Protection, Nature Protection Directorate, Roma, 1–32. [CD-ROM version]
- Antonietti A, Dellavedova R (2013) Nota n. 528. *Mazus pumilus* (Burm.f.) Steenis (Phrymaceae). In: Selvaggi A, Soldano A, Pascale M, Dellavedova R (Eds) Note floristiche piemontesi n. 460–544. *Rivista Piemontese di Storia Naturale* 34: 422.
- Anzalone B, Iberite M, Lattanzi E (2005) Lazio. In: Conti F, Abbate G, Alessandrini A, Blasi C (Eds) An annotated checklist of the Italian vascular flora. Palombi Editori, Roma, 33–185, 225–230.

- Anzalone B, Iberite M, Lattanzi E (2010) La Flora vascolare del Lazio. *Informatore Botanico Italiano* 42(1): 187–317.
- Ardenghi NMG, Mossini S (2014) *Cardamine flexuosa* subsp. *debilis* O.E.Schulz. In: Raab-Straube E von, Raus T (Eds) Euro+Med-Checklist Notulae, 3. *Willdenowia* 44(2): 287–299. doi: 10.3372/wi.44.44211
- Bacchetta G, Mayoral García-Berlanga O, Podda L (2009) Catálogo de la flora exótica de la Isla de Cerdeña (Italia). *Flora Montiberica* 41: 35–61.
- Banfi E, Bracchi G, Galasso G, Romani E (2005) Agrostologia Placentina. *Memorie della Società Italiana di Scienze Natuarli e del Museo Civico di Storia Naturale di Milano* 33(2): 1–80.
- Banfi E, Galasso G, Assini S, Brusa G, Gariboldi L (2009) Regional Experts: Lombardia. In: Celesti-Grapow L, Pretto F, Brundu G, Carli E, Blasi C (Eds) A thematic contribution to the National Biodiversity Strategy. Plant invasion in Italy, an overview. Ministry for the Environment Land and Sea Protection, Nature Protection Directorate, Roma, 1–32. [CD-ROM version]
- Banfi E, Galasso G (Eds) (2010) La Flora Esotica Lombarda. Museo di Storia Naturale di Milano, Milano, 274 pp. [CD-ROM version]
- Bogosavljević SS, Zlatković BK (2015) Two alien species of *Bidens* (Compositae), new to the flora of Serbia. *Phytologia Balcanica* 21(2): 129–138.
- Brundu G, Lozano V, Manca M, Celesti-Grapow L, Sulas L (2015) *Arctotheca calendula* (L.) Levyns: An emerging invasive species in Italy. *Plant Biosystems* 149(6): 954–957. doi: 10.1080/11263504.2015.1125963
- Burton JD (1990) *Maclura pomifera* (Raf.) Schneid. Osage-orange. In: Burns RM, Honkala BH (Eds) Silvics of North America 2. Hardwoods. Agriculture Handbook 654. U.S. Department of Agriculture, Forest Service, Washington, DC, 426–432.
- Buzzi S (1973) Nuova infestante. *Il risicoltore* 1973(novembre).
- Caruel T (1860) Prodromo della Flora Toscana. Coi Tipi di Felice Le Monnier, Firenze.
- Celesti-Grapow L, Pretto F, Brundu G, Carli E, Blasi C (Eds) (2009) A thematic contribution to the National Biodiversity Strategy. Plant invasion in Italy, an overview. Ministry for the Environment Land and Sea Protection, Nature Protection Directorate, Roma, 1–32. [CD-ROM version]
- Celesti-Grapow L, Capotorti G, Del Vico E, Lattanzi E, Tilia A, Blasi C (2013) The vascular flora of Rome. *Plant Biosystems* 147(4): 1059–1087. doi: 10.1080/11263504.2013.862315
- Cockel CP, Tanner RA (2012) *Impatiens glandulifera* Royle (Himalayan balsam). In: Francis RA (Ed.) A Handbook of Global Freshwater Invasive Species. Earthscan, London, New York, 67–77.
- Conti F, Abbate G, Alessandrini A, Blasi C (Eds) (2005) An Annotated Checklist of the Italian Vascular Flora. Palombi Editori, Roma, 428 pp.
- Conti F, Alessandrini A, Bacchetta G, Banfi E, Barberis G, Bartolucci F, Bernardo L, Bonacquisti S, Bouvet D, Bovio M, Brusa G, Del Guacchio E, Foggi B, Frattini S, Galasso G, Gallo L, Gangale C, Gottschlich G, Grünanger P, Gubellini L, Iiriti G, Lucarini D, Marchetti D, Moraldo B, Peruzzi L, Poldini L, Prosser F, Raffaelli M, Santangelo A, Scassellati E, Scortegagna S, Selvi F, Soldano A, Tinti D, Ubaldi D, Uzunov D, Vidali M (2007) Integrazioni alla checklist della flora vascolare italiana. *Natura Vicentina* 10(2006): 5–74.

- Crisafulli A, Picone RM, Zaccone S (2011) *Phyllanthus tenellus* (Phyllanthaceae) a new alien species naturalized in Sicily, first record for Italy. *Flora Mediterranea* 21: 293–297.
- Del Guacchio E (2015) Integrazioni, aggiornamenti e note alla flora esotica della Campania. *Informatore Botanico Italiano* 47(2): 147–154.
- Desfayes M (1997) *Mazus pumilus* (Scrophulariaceae), adventice nouvelle pour l'Italie et *Lemna minuta* (Lemnaceae), espèce nouvelle pour la Province de Pavie. *Saussurea* 28: 65–66.
- Dickoré WB, Kasperek G (2010) Species of *Cotoneaster* (Rosaceae, Maloideae) indigenous to, naturalising or commonly cultivated in Central Europe. *Willdenowia* 40(1): 13–45. doi: 10.3372/wi.40.40102
- Fryer J, Hylmö B (2009) *Cotoneasters*. A comprehensive Guide to Shrubs for Flowers, Fruit, and Foliage. Timber Press, Portland, London, 200 pp.
- Fryer J, Hylmö B (2011) *Cotoneaster* Medikus. In: Cullen J, Knees SG, Kubey HS (Eds) *The European Garden Flora. A manual for the identification of plants cultivated in Europe, both out-of-doors and under glass*. 2 ed., Vol. 3. Cambridge University Press, Cambridge, 286–296.
- Galasso G (2010) Notulae 3–4. In: Galasso G, Banfi E (Eds) *Notulae ad plantas advenas longobardiae spectantes*: 1 (1–28). *Pagine Botaniche* 34: 21.
- Galasso G, Gestri G, Peruzzi L, Banfi E (2011) Notula: 69. In: Barberis G, Nepi C, Peccenini S, Peruzzi L (Eds) *Notulae alla flora esotica d'Italia*: 4 (54–89). *Informatore Botanico Italiano* 43(1): 147.
- Galasso G, Banfi E, Saiani D (2013) Notula: 194. In: Barberis G, Nepi C, Peccenini S, Peruzzi L (Eds) *Notulae alla flora esotica d'Italia*: 9 (185–201). *Informatore Botanico Italiano* 45(2): 309.
- Hejda M, Pyšek P (2006) What is the impact of *Impatiens glandulifera* on species diversity of invaded riparian vegetation? *Biological Conservation* 132(2): 143–152. doi: 10.1016/j.biocon.2006.03.025
- Lazzeri V, Mascia F, Sammartino F, Campus G, Caredda A, Carlesi V, Fois M, Gestri G, Mannocci M, Mazzoncini V, Lombraña AC, Santinelli M (2013) Novità floristiche per le regioni Sardegna e Toscana. *Acta Plantarum Notes* 2: 42–59.
- Lazzeri V, Sammartino F, Campus G, Caredda A, Mascia F, Mazzoncini V, Testa N, Gestri G (2015) Note floristiche tosco-sarde II: novità regionali e locali e considerazioni tassonomiche per le regioni Sardegna e Toscana. *Annali del Museo Civico di Rovereto. Sezione: Archeologia, Storia, Scienze Naturali* 30(2014): 331–368.
- Litzler P (1979) *Paspalum urvillei* Steudel en Espagne. *Bulletin de la Société Botanique de France. Lettres botaniques* 126(1): 95–102. doi: 10.1080/01811797.1979.10824379
- Lu L, Brach AR (2003) *Cotoneaster* Medikus. In: Wu ZY, Raven PH, Hong DY (Eds) *Flora of China*, Vol. 9. Science Press, Beijing, Missouri Botanical Garden Press, St. Louis, 85–108.
- Marhold K, Šlenker M, Kudoh H, Zozomová-Lihová J (2016) *Cardamine occulta*, the correct species name for invasive Asian plants previously classified as *C. flexuosa*, and its occurrence in Europe. *PhytoKeys* 62: 57–72. doi: 10.3897/phytokeys.62.7865
- Matthews VA (2011) *Tulbaghia* Linnaeus. In: Cullen J, Knees SG, Kubey HS (Eds) *The European Garden Flora. A manual for the identification of plants cultivated in Europe, both out-of-doors and under glass*. 2 ed., Vol. 1. Cambridge University Press, Cambridge, 132–133.

- Olivieri N (2015) Notulae: 265–278. In: Galasso G, Nepi C, Domina G, Peruzzi L (Eds) Notulae alla Flora esotica d'Italia: 12 (244–287). Informatore Botanico Italiano 47(1): 84–87.
- Peccenini Gardini S (1985) *Mazus japonicus* (Thunb.) Kuntze in Italia. Atti dell'Istituto Botanico e del Laboratorio Crittogamico dell'Università di Pavia, ser. 7 2(1983): 95–98.
- Perrino EV, Wagensommer RP, Medagli P (2014) *Aegilops* (Poaceae) in Italy: taxonomy, geographical distribution, ecology, vulnerability and conservation. Systematics and Biodiversity 12(3): 331–349. doi: 10.1080/14772000.2014.909543
- Piccoli F (1974) Su una Scrofulariacea nuova infestante del riso (*Limnophila indica* × *sessiflora*). Il Riso 23(2): 187–190.
- Piccoli F, Pellizzari M, Alessandrini A (2014) Flora del Ferrarese. Istituto per i beni artistici culturali e naturali dell'Emilia-Romagna, Angelo Longo Editore, Ravenna.
- Pignatti S (1982) Flora d'Italia, Vol. 3. Edagricole, Bologna.
- PlantNET (2016+) PlantNET (The NSW Plant Information Network System). Royal Botanic Gardens and Domain Trust, Sydney. <http://plantnet.rbgsyd.nsw.gov.au> [accessed 19.01.2016]
- Richardson DM, Holmes PM, Esler KJ, Galatowitsch SM, Stromberg JC, Kirkman SP, Pyšek P, Hobbs RJ (2007) Riparian vegetation: degradation, alien plant invasions, and restoration prospects. Diversity and Distributions 13(1): 126–139. doi: 10.1111/j.1366-9516.2006.00314.x
- Sanders RW (2012) Taxonomy of *Lantana* sect. *Lantana* (Verbenaceae): II. Taxonomic revision. Journal of the Botanical Research Institute of Texas 6(2): 403–441.
- Selvaggi A, Dellavedova R (2015) Nota n. 687. *Mazus pumilus* (Burm.f.) Steenis (Phrymaceae). In: Selvaggi A, Soldano A, Pascale M, Dellavedova R (Eds) Note floristiche piemontesi n. 604–705. Rivista Piemontese di Storia Naturale 36: 321–322.
- Shi Z, Kilian N (2011) *Youngia* Cassini. In: Wu ZY, Raven PH, Hong DY (Eds) Flora of China, Vol. 20–21. Science Press, Beijing, Missouri Botanical Garden Press, St. Louis, 252–263.
- Spjut RW (1994) A systematic treatment of fruit types. Memoirs of the New York Botanical Garden 70: 1–182.
- Stace CA (2010) New Flora of British Isles (3 ed.). Cambridge University Press, Cambridge, 1266 pp.
- Stinca A, D'Auria G, Salerno G, Motti R (2013) Ulteriori integrazioni alla flora vascolare aliena della Campania (Sud Italia). Informatore Botanico Italiano 45(1): 71–81.
- Theis N, Donoghue MJ, Li J (2008) Phylogenetics of the Caprifolieae and *Lonicera* (Dipsacales) based on nuclear and chloroplast DNA sequences. Systematic Botany 33(4): 776–783. doi: 10.1600/036364408786500163
- Tison J-M, de Foucault B (2014) Flora Gallica – Flore de France: Biotope Éditions. Société botanique de France, Mèze, 1400 pp.
- Tutin TG (1976) *Bidens* L. In: Tutin TG, Heywood VH, Burges NA, Moore DM, Valentine DH, Walters SM, Webb DA (Eds) Flora Europaea, Vol. 4. Cambridge University Press, Cambridge, 139–140.
- Verloove F, Ardenghi NMG (2015) New distributional records of non-native vascular plants in northern Italy. Natural History Sciences 2(1): 5–14. doi: 10.4081/nhs.2015.219

- Viggiani P, Tabacchi M, Angelini R (2003) Vegetazione spontanea di risaie e canali. Bayer CropScience, Milano, 368 pp.
- Webster GL (1970) A revision of *Phyllanthus* (Euphorbiaceae) in the continental United States. *Brittonia* 22(1): 44–76. doi: 10.2307/2805721
- Wilson CR (1998) Incidence of weed reservoirs and vectors of tomato spotted wilt tospovirus on Southern Tasmania lettuce farms. *Plant Pathology* 47(2): 171–176. doi: 10.1046/j.1365-3059.1998.00227.x
- Wunderlin RP, Hansen BF (2008) Atlas of Florida Vascular Plants. Institute for Systematic Botany, University of South Florida, Tampa. <http://florida.plantatlas.usf.edu/> [accessed 14.09.2015]
- Yang Q, Landrein S, Osborne J, Borosova R (2011) Caprifoliaceae. In: Wu ZY, Raven PH, Hong DY (Eds) *Flora of China*, Vol. 19. Science Press, Beijing, Missouri Botanical Garden Press, St. Louis, 616–641.
- Zuloaga F, Morrone O (2005) Revisión de las especies de *Paspalum* para América del Sur austral. *Monographs in Systematic Botany from the Missouri Botanical Garden* 102: 1–297.